REMARKS

The Examiner is thanked for the due consideration of the application.

Claims 1-3, 5-11 and 13 are pending in the application. Claims 4 and 12 have been canceled and their subject matter has been generally incorporated into claim 1.

New process claim 13 is presented, which is clearly drawn to the same invention as the apparatus claims of record. That is, new claim 13 draws support from the apparatus claims as well as from paragraphs 0036 and 0038 of corresponding U.S. Publication 2004/0259233. Due to the nexus between the apparatus claims and the newly presented process claim, there is no undue burden placed upon the Examiner to consider all the claims of the present invention.

No new matter is believed to be added to the application by this amendment.

Rejections Based on SCHNEIDER

Claims 1, 2 and 12 have been rejected under 35 USC §103(a) as being unpatentable over SCHNEIDER (U.S. Patent 4,670,148) in view of KATZ (U.S. Patent 4,838,733), YAO (U.S. Patent 6,541,073) and BILLINGS (U.S. Patent 5,653,288).

Claims 3, 4 and 8 have been rejected under 35 USC §103(a) as being unpatentable over SCHNEIDER in view of KATZ, BILLINGS and YAO, and further in view of NOBLE (U.S. Patent 4,442,974).

Claims 5, 6, 9 and 10 have been rejected under 35 USC §103(a) as being unpatentable over SCHNEIDER in view of KATZ, BILLINGS, YAO, and NOBLE, and further in view of JOHNSON (U.S. Patent 4,026,355).

Claims 7 and 11 have been rejected under 35 USC §103(a) as being unpatentable over SCHNEIDER in view of KATZ, BILLINGS, YAO, NOBLE, and JOHNSON, and further in view of JACKSON (U.S. Publication 2002/0023505).

These rejections are respectfully traversed.

The present invention pertains to a system for regulation and discontinuous measurement of an oxygen content or a content of any other gas in platforms for composting or processing waste, in the form of swaths. The present invention is illustrated, by way of example, in Figure 3 of the application, which is reproduced below.

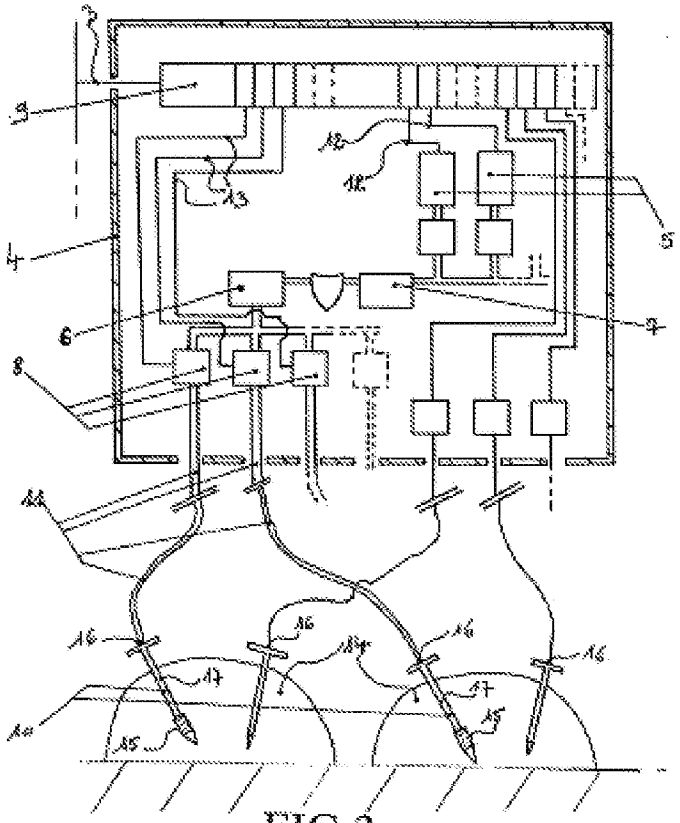


FIG 3

As is shown in the figure above, at least one remote bay has at least one gas measurement probe for measuring a concentration of a given gas, the measurement probe being at least one oxygen or CO_2 measurement probe. A gas intake pump and electric valves are operated by a program controller, and a pipe connects each of the electric valves to a gas sampling device, the electric valves being coupled to the pump allowing the air and the gases contained in this air at each sampling device to be drawn in successively and sent to the measurement probe.

The sampling device is a hollow sampling rod with two opposite ends able to be driven into the pile(s) of waste or compost (see Figure 4, reproduced below). Each one of the hollow

sampling rods corresponds to one single pipe and being fitted with a tapered air intake strainer at one end, the pipe being connected at the other end of the rod, and the oxygen measurement probe is able to supply within a very short response time the measurement of the oxygen content of several swaths. Consequently, this probe is a heated zirconium oxide sensor with a response time of less than ten seconds.

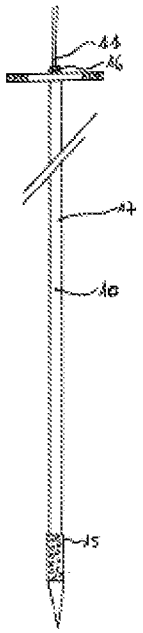


FIG 4

As is set forth in instant claim 1, in the single gas measurement probe, in particular for measuring oxygen or CO_2, respectively, the oxygen or CO_2 content of several swaths is determined by means of samples obtained from the various gas sampling rods.

In the present invention there is only one sensor for each type of gas.

In comparison, SCHNEIDER (at least in the drawing figures) utilizes one sensor for each withdrawal line and thus has as many sensors as withdrawal lines. In addition, the strainer at the end of the rod of the present invention is not found in SCHNEIDER. On the contrary this reference uses apertures at a distance from the end of the pipe. This is also the case for the plastic pipe in the rod of BILLINGS.

Figures 1 and 2 of SCHNEIDER are reproduced below.

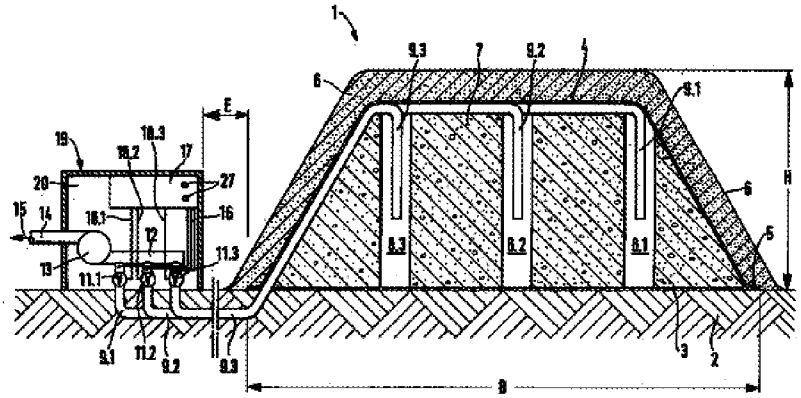


FIG.1

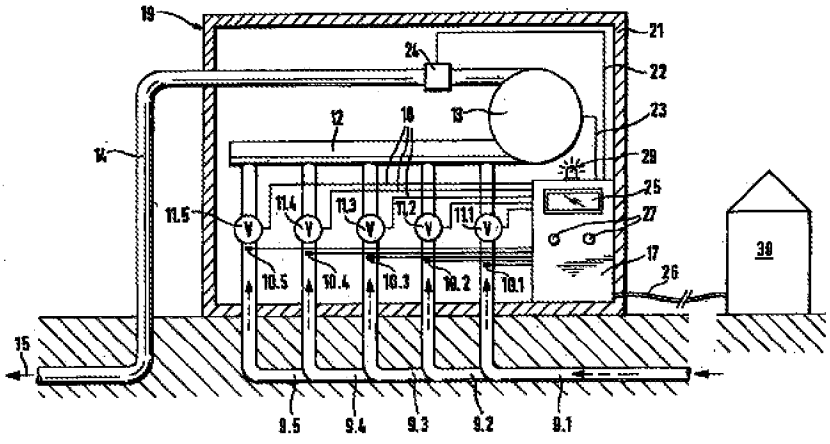


FIG. 2

In SCHNEIDER it is clearly taught that “at least one sensor associated with each of the gas withdrawal lines” is used (Column 2, lines 51-52). Moreover, in each exemplified embodiment in relation to the drawing figures there is one sensor for each withdrawal line, which sensor can be in the dump, upstream or downstream of shutoff devices.

Such a teaching does not give incentive to the use of only one sensor (measurement probe) for all the withdrawal lines as claimed in independent claim 1.

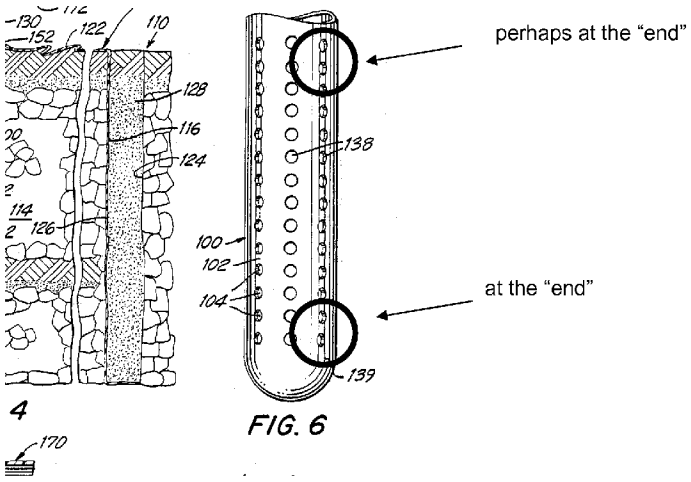
The sensor is a high cost device and calibration is required from time to time. Multiplying the sensors means higher costs and more complexity for calibration and maintenance. Electric valves are used to switch sequentially to the sensor one of the plastic pipe of the set of plastic pipes in the current invention.

In the present invention, it is clear at least from the drawing figures that the sampling device is formed from a rod able to be driven into a pile of compost. The rods are directly driven into the waste. This explains why air intake strainers are used at the end of the rod to avoid any clogging during aspiration of the gas.

On the contrary, in SCHNEIDER, it is clearly taught that gas wells 8.1, 8.2, 8.3 are made over the entire height of the refuse pile (Column 4, lines 37-50).

Those gas wells are larger than the gas withdrawal lines and they are shown as being not in contact with the refuse in the wells. As a consequence, there is no risk of sucking in the withdrawal line any refuse and thus the strainer has no use.

In KATZ, drawtubes are inserted in the material of the landfill volume. Those drawtubes have a number of apertures with pouches disposed at some distance from the rounded end of draw tubes. Moreover, the gas is directly sucked in those drawtubes. This is clear in Figure 6 of KATZ (which has been annotated by the Office) reproduced below.



Even if by chance one considers using the drawtubes of KATZ in the SCHNEIDER apparatus (wells are made in SCHNEIDER, not in KATZ) the resulting object will be different from the one claimed in the current application: the drawtubes of KATZ will be inserted in the wells of SCHNEIDER. Above all, the result will

not be a tapered air intake strainer at one end of a hollow sampling rod in which a plastic pipe is passing through.

It is clear that in KATZ the apertures are not at the end of the drawtubes but at a distance from it. It is also clear that there is no pipe in KATZ's drawtube.

There is no teaching in the cited documents for departing from KATZ's teaching and adding a pipe and suppressing the apertures and replacing them with a strainer at another place (end of the tube).

It should be remembered that the sampling rods of the current invention are removable and reusable. This means that they are inserted in the dump multiple times and that their ends are each time stressed and could be damaged. In KATZ, the drawtubes appear to be permanently left into their final position. If by chance they are reused and damaged, the whole tube will have to be changed and disposed of. In the current invention, this is not the case as only the tapered air intake strainer need to be changed in case the sampling apparatus is damaged during insertion in the dump.

Regarding the BILLINGS document, it refers to an injection system for treating water. This is a completely different field from the sampling of gas. Moreover, in this document the only flexible tube 130 (Figures 11 , 12, 13, 14, 15) is an injection tube 130 which is outside the pipe 24 and in a

well 18 made in the ground. Figure 11 of BILLINGS is reproduced below.

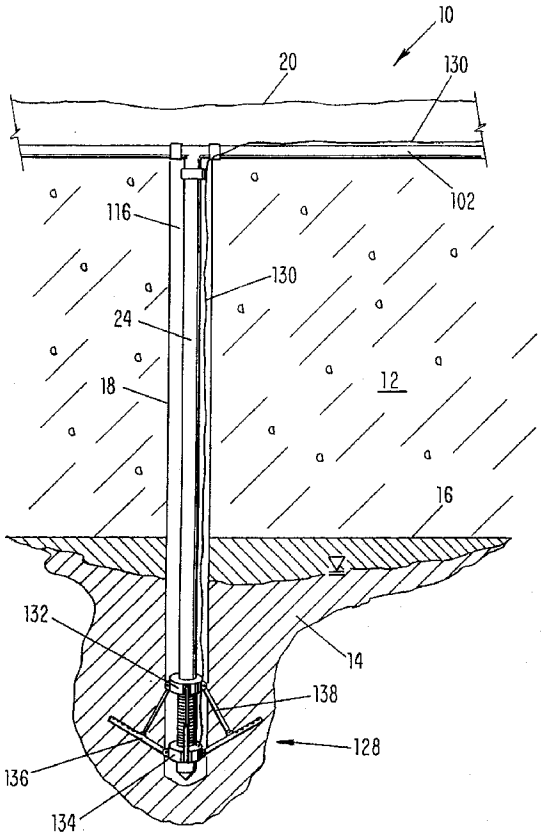


FIG-11

Such a structure cannot be implemented in a gas sampling system. However if by chance the flexible tube was used it would be in a manner totally different from the one of the current invention: outside of a pipe.

Other modifications of SCHNEIDER's teaching based on the secondary references would be outside the clear teaching of those documents and would be the result of *a posteriori* reasoning knowing the details of the claims of the present invention.

Additional distinctions of the present invention over the applied art have been made of record in the application which, for brevity, are not repeated here.

One of ordinary skill and creativity would thus fail to produce a claimed embodiment of the present invention from a knowledge of the applied art references. A *prima facie* case of unpatentability has thus not been made.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

As no issues remain, the Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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